IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.,)	
Plaintiff,)	
v.)	C.A. No. 17-275 (LPS)
OXFORD NANOPORE TECHNOLOGIES, INC., and OXFORD NANOPORE TECHNOLOGIES, LTD.,)))	REDACTED PUBLIC VERSION
Defendants.))	

DEFENDANT OXFORD NANOPORE TECHNOLOGIES, LTD.'S ANSWER AND DEFENSES TO PLAINTIFF'S SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Defendant Oxford Nanopore Technologies, Ltd. ("Oxford, Ltd." or "Defendant") by and through its undersigned counsel, hereby responds to Plaintiff Pacific Biosciences of California, Inc.'s ("PacBio" or "Plaintiff") Second Amended Complaint for Patent Infringement ("Second Amended Complaint") filed on July 11, 2019 and allowed by the Court on August 15, 2019.

As an initial matter, Oxford, Ltd. denies each and every allegation contained in the Second Amended Complaint that is not expressly admitted below. Any factual allegation admitted below is admitted only as to the specific facts, and not as to any purported conclusions, characterizations, implications, or speculations that might follow from the admitted facts. Additionally, to the extent that the headings or any other non-numbered statements in the Second Amended Complaint contain any allegations, Oxford, Ltd. denies each and every such allegation. Oxford, Ltd. includes headings herein solely for purposes of clarity.

NATURE OF THE ACTION

- 1. Oxford, Ltd. admits that the Second Amended Complaint purports to state a claim for patent infringement arising under the United States Patent Act, 35 U.S.C. §§ 1, et seq. Oxford, Ltd. denies any remaining allegations of paragraph 1, and specifically denies any such infringement.
- 2. Oxford, Ltd. admits that the Second Amended Complaint purports to bring an action arising under the Patent Laws of the United States, 35 U.S.C. §§ 1, et seq. Oxford, Ltd. denies any remaining allegations of paragraph 2, and specifically denies that it has committed any acts of infringement.

THE PARTIES

- 3. Oxford, Ltd. is without knowledge or information sufficient to form a belief regarding the truth of the allegations of paragraph 3 and, therefore, denies them.
- 4. Oxford, Ltd. is without knowledge or information sufficient to form a belief regarding the truth of the allegations of paragraph 4 and, therefore, denies them.
- 5. Oxford, Ltd. is without knowledge or information sufficient to form a belief regarding the truth of the allegations of paragraph 5 and, therefore, denies them.
- 6. Oxford, Ltd. is without knowledge or information sufficient to form a belief regarding the truth of the allegations of paragraph 6 and, therefore, denies them.
- 7. Oxford, Ltd. is without knowledge or information sufficient to form a belief regarding the truth of the allegations of paragraph 7, and therefore denies them.
- 8. Oxford, Ltd. admits that Oxford Nanopore Technologies, Ltd. is the corporate parent of Oxford Nanopore Technologies, Inc., and that Oxford Nanopore Technologies, Ltd. is a corporation organized under the laws of England and Wales with its principal place of business at Edmund Cartwright House, 4 Robert Robinson Avenue, Oxford Science Park, Oxford, OX4

4GA, UK. Oxford, Ltd. admits that it has sold products under the trademarks MinION, PromethION, and GridION X5, as well as reagents and kits for use with the same, for importation into the United States. Oxford, Ltd. denies the remaining allegations of paragraph 8, and specifically denies that it has committed any acts of infringement.

JURISDICTION AND VENUE

- 9. Oxford, Ltd. admits that the Second Amended Complaint purports to state a claim for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. §§ 1, et seq. Oxford, Ltd. denies any remaining allegations of paragraph 9, and specifically denies that it has committed any acts of infringement.
- 10. Oxford, Ltd. admits that this Court has subject matter jurisdiction over causes of action for alleged patent infringement based on 28 U.S.C. §§ 1331 and 1338(a). Oxford, Ltd. denies any remaining allegations of paragraph 10, and specifically denies that it has committed any acts of infringement.
- 11. Oxford, Ltd. is without knowledge or information sufficient to form a belief regarding the truth of the allegations of paragraph 11, and therefore denies them.
- 12. Oxford, Ltd. admits that this Court has personal jurisdiction over Oxford, Ltd. for purposes of this action only. Oxford, Ltd. admits that it has manufactured products that were sold to customers including the University of Delaware and DuPont, and that products manufactured by Oxford, Ltd. are available for purchase in Delaware on a website https://nanoporetech.com. Oxford, Ltd. denies the remaining allegations of paragraph 12.
- 13. Oxford, Ltd. admits that Exhibit 13, which appears to be a printout of https://sites.udel.edu/wisserlab/people, states, *inter alia*, than an individual is "our resident expert on Oxford Nanopore MinION sequencing." Oxford, Ltd. admits that Exhibit 14 appears to be a document stating, *inter alia*, "Oxford Nanopore Technologies Ltd. Nanopore Community Terms

and Conditions – 30 March 2017." Oxford, Ltd. admits that Exhibit 15 appears to be a document stating, *inter alia*, "Nanopore Product Terms and Conditions." To the extent the allegations of paragraph 13 purport to characterize the contents of written documents, said documents speak for themselves. Oxford, Ltd. is without knowledge or information sufficient to form a belief regarding the truth of the remaining allegations of paragraph 13, and therefore denies them.

- 14. Oxford, Ltd. admits that an individual who is an Oxford Ltd. corporate officer has contacted individuals at DuPont regarding certain support matters involving Oxford products. Oxford, Ltd. is without knowledge or information sufficient to form a belief regarding the truth of the remaining allegations of paragraph 14, and therefore denies them.
- 15. The averments of paragraph 15 constitute conclusions of law to which no response is required. To the extent a response is required, Oxford, Ltd. denies those averments.
- 16. Oxford, Ltd. admits that Spike Willcocks is an officer of Oxford, Ltd., and that James McDonald was previously an officer of Oxford, Ltd. Oxford, Ltd. is without knowledge or information sufficient to form a belief regarding the truth of the remaining allegations of paragraph 16, and therefore denies them.
- 17. Oxford, Ltd. admits that Exhibit 16, which appears to be a printout of https://www.linkedin.com/in/sisseljuul/, states, *inter alia*, "Sissel Juul Jensen." Oxford, Ltd. admits that Exhibit 17, which appears to be a printout of https://www.linkedin.com/in/spike-willcocks-88319b32/, states, *inter alia*, "Spike Willcocks." Oxford, Ltd. admits that Exhibit 18, which appears to be a printout of https://www.linkedin.com/in/james-brayer-b751386, states, *inter alia*, "James Brayer." To the extent the allegations of paragraph 17 purport to characterize the contents of written documents, said documents speak for themselves. Oxford, Ltd. is without

knowledge or information sufficient to form a belief regarding the truth of the remaining allegations of paragraph 17, and therefore denies them.

- 18. Oxford, Ltd. admits that Exhibit 19, which appears to be a printout of https://nanoporetech.com/contact, states, *inter alia*, "Oxford Headquarters." To the extent the allegations of paragraph 18 purport to characterize the contents of a written document, said document speaks for itself. Oxford, Ltd. is without knowledge or information sufficient to form a belief regarding the truth of the allegations of paragraph 18, and therefore denies them.
- 19. Oxford, Ltd. admits that Baker Botts L.L.P. is its legal counsel in the present action and in Investigation No. 337-TA-1032 at the International Trade Commission ("ITC"). Oxford, Ltd. is without knowledge or information sufficient to form a belief regarding the truth of the remaining allegations of paragraph 19, and therefore denies them.
- 20. Oxford, Ltd. does not contest that with respect to Oxford, Ltd., venue is proper in this Court under 28 U.S.C. § 1400(c), but denies that this is the most convenient forum. Oxford, Ltd. is without knowledge or information sufficient to form a belief regarding the truth of the remaining allegations of paragraph 20, and therefore denies them.

BACKGROUND

- 21. Oxford, Ltd. admits that it has developed and offered products under the following trademarks MinION, PromethION, and GridION X5, as well as reagents and kits for use with the same.
- . Oxford, Ltd. is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 21, and therefore denies them.
- 22. Oxford, Ltd. admits that it has developed and offered instruments under the following trademarks MinION, PromethION, and GridION X5, as well as reagents, consumables, and/or software for use therewith. Oxford, Ltd. admits that paragraph 22 includes

what appear to be undated illustrations of the exterior and interior of a MinION device. Oxford, Ltd. further admits that paragraph 22 includes what appears to be an undated illustration of a nanopore as seen in Exhibit 5 of the First Amended Complaint. Oxford, Ltd. denies the remaining allegations of paragraph 22.

- 23. Oxford, Ltd. admits that Exhibit 6 to the First Amended Complaint, which appears to be a printout of the biostars.org website, states, *inter alia*, "[t]he PromethION, a whole box of MinION sequencers." Oxford, Ltd. admits that paragraph 23 includes what appears to be an undated illustration of a PromethION instrument. Oxford, Ltd. denies the remaining allegations of paragraph 23.
- 24. Oxford, Ltd. admits that paragraph 24 includes what appears to be an undated illustration of DNA being drawn through a hole. Oxford, Ltd. denies the remaining allegations of paragraph 24.
- 25. To the extent the allegations of paragraph 25 purport to characterize the behavior or characteristics of sequencing systems generally, Oxford, Ltd. lacks knowledge or information sufficient to form a belief as to the truth of these allegations, and therefore denies them. Oxford, Ltd. denies the remaining allegations of paragraph 25.
- 26. Oxford, Ltd. admits that paragraph 26 contains what appears to be a reproduction of claim 1 of the '400 Patent. Oxford, Ltd. denies any remaining allegations of paragraph 26.
 - 27. Oxford, Ltd. denies the allegations of paragraph 27.
- 28. Oxford, Ltd. admits that Exhibit 2 to the First Amended Complaint purports to be a preliminary and exemplary claim chart detailing Oxford, Ltd.'s alleged infringement of multiple claims of the '400 Patent. Oxford, Ltd. denies that it has committed any acts of infringement. Oxford, Ltd. denies the remaining allegations of paragraph 28.

ALLEGED WILLFUL INFRINGEMENT

- 29. Oxford, Ltd. denies the allegations of paragraph 29.
- 30. Oxford, Ltd. denies the allegations of paragraph 30.
- 31. To the extent the allegations of paragraph 31 purport to characterize witness testimony, said testimony speaks for itself. Oxford, Ltd. denies the allegations of paragraph 31.
- 32. Oxford, Ltd. admits that ONTS.ITC.00029591 was a document produced in Investigation No. 337-TA-1032 at the International Trade Commission. To the extent the allegations of paragraph 32 purport to characterize the contents of written documents, said documents speak for themselves. Oxford, Ltd. denies any remaining allegations of paragraph 32.
- 33. Oxford, Ltd. admits that ONTS.ITC.00004332 was a document produced in Investigation No. 337-TA-1032 at the International Trade Commission. To the extent the allegations of paragraph 33 purport to characterize the contents of written documents, said documents speak for themselves. Oxford, Ltd. denies any remaining allegations of paragraph 33.
- 34. Oxford, Ltd. admits that ONTS.ITC.00762348 was a document produced in Investigation No. 337-TA-1032 at the International Trade Commission. To the extent the allegations of paragraph 34 purport to characterize the contents of written documents, said documents speak for themselves. Oxford, Ltd. denies any remaining allegations of paragraph 34.
- 35. Oxford, Ltd. admits that Exhibit 12 to the First Amended Complaint appears to be a copy of an information disclosure statement filed in U.S. Patent Application No. 13/147,159. Oxford, Ltd. admits that the face of the '400 Patent claims priority to an application that appears to have published as U.S. Patent Application Publication No. 2010/0331194. Oxford, Ltd. denies any remaining allegations of paragraph 35.
- 36. To the extent the allegations of paragraph 36 purport to characterize witness testimony, said testimony speaks for itself. Oxford, Ltd. denies the allegations of paragraph 36.

- 37. To the extent the allegations of paragraph 37 purport to characterize witness testimony, said testimony speaks for itself. Oxford, Ltd. denies the allegations of paragraph 37.
- 38. To the extent the allegations of paragraph 38 purport to characterize witness testimony, said testimony speaks for itself. Oxford, Ltd. denies the allegations of paragraph 38.

. Oxford, Ltd. denies any remaining allegations of paragraph 39.

COUNT I

(Alleged Infringement of U.S. Patent No. 9,546,400)

- 40. Oxford, Ltd. repeats and restates its answers to the preceding paragraphs herein and incorporates them herein by reference as though fully set forth in their entirety. Oxford, Ltd. denies any remaining allegations of paragraph 40.
- 41. Oxford, Ltd. admits that U.S. Patent No. 9,546,400 ("the '400 Patent") is, on its face, entitled "Nanopore Sequencing Using N-mers." Oxford, Ltd. admits that the face of the '400 Patent indicates it was issued on January 17, 2017, and lists as inventors Steven Turner and Benjamin Flusberg. Oxford, Ltd. admits that the face of the '400 Patent indicates that it is assigned to Plaintiff PacBio. Oxford, Ltd. is without knowledge or information sufficient to form a belief regarding the truth of the remaining allegations of paragraph 41 and, therefore, denies them.
- 42. Oxford, Ltd. denies that it has infringed or continues to infringe any valid claim of the '400 Patent, literally or under the doctrine of equivalents. Oxford, Ltd. denies that Exhibit 2¹ is or purports to be a preliminary and exemplary claim chart detailing Oxford's alleged

Oxford, Ltd. notes that paragraph 42 of PacBio's Second Amended Complaint references "Exhibit 3," which Oxford, Ltd. believes is a typographical error for "Exhibit 2."

infringement of any claims of the '400 Patent. Oxford, Ltd. denies any remaining allegations of paragraph 42.

- 43. Oxford, Ltd. admits that Exhibit 12 to the First Amended Complaint appears to be a copy of an information disclosure statement filed in U.S. Patent Application No. 13/147,159. Oxford, Ltd. admits that the face of the '400 Patent claims priority to an application that appears to have published as U.S. Patent Application Publication No. 2010/0331194. Oxford, Ltd. denies any remaining allegations of paragraph 43.
 - 44.
- Oxford, Ltd. denies that it has infringed or continues to infringe any valid claim of the '400 Patent. Oxford, Ltd. denies any remaining allegations of paragraph 44.
- 45. Oxford, Ltd. admits that paragraph 45 appears to reference an excerpt of the Response of Oxford Nanopore Technologies Ltd., Oxford Nanopore Technologies, Inc., and Metrichor Ltd. to the Complaint of Pacific Biosciences of California, Inc., and Notice of Investigation No. 337-TA-1032 at Exhibit 8, ¶ 53. To the extent the allegations of paragraph 45 purport to characterize the contents of a written document, said document speaks for itself. Oxford, Ltd. denies any remaining allegations of paragraph 45.
- 46. Oxford, Ltd. admits that Exhibit 9 to the First Amended Complaint, which appears to be a printout from the website https://nanoporetech.com, states, *inter alia*, that the technology in at least certain products developed by Oxford, Ltd. offers "real-time DNA/RNA sequencing," "no capital cost," "long reads," "scalability," and "high-fidelity." To the extent the allegations of paragraph 46 purport to characterize the contents of a written document, said document speaks for itself. Oxford, Ltd. denies the remaining allegations of paragraph 46.

- 47. Oxford, Ltd. admits that customers in the United States may purchase starter packs for MinION or GridION X5 instruments from the website https://nanoporetech.com. Oxford, Ltd. admits that Exhibit 10 to the First Amended Complaint, which appears to be a printout from the website https://nanoporetech.com/getting-started-with-minion, states, *inter alia*, "[b]uy a Starter Pack to join the growing numbers in the Nanopore Community." To the extent the allegations of paragraph 47 purport to characterize the contents of a written document, said document speaks for itself. Oxford, Ltd. denies the remaining allegations of paragraph 47.
 - 48. Oxford, Ltd. denies the allegations of paragraph 48.
 - 49. Oxford, Ltd. denies the allegations of paragraph 49.
- 50. Oxford, Ltd. admits that flowcells for use in the MinION and PromethION instruments include protein nanopores that may be used with certain reagents in methods for sequencing nucleic acid molecules. Oxford, Ltd. denies any remaining allegations of paragraph 50.
 - 51. Oxford, Ltd. denies the allegations of paragraph 51.
 - 52. Oxford, Ltd. denies the allegations of paragraph 52.

PRAYER FOR RELIEF

53. Oxford, Ltd. denies that PacBio is entitled to any of the relief sought in its prayer for relief against Oxford, Ltd. PacBio's prayer should be denied in its entirety and with prejudice.

DEMAND FOR JURY TRIAL

- 54. Oxford, Ltd. does not object to a trial by jury on all issues so triable.
- 55. All allegations not specifically admitted are denied.

DEFENSES

- 56. By asserting the following Defenses, the burden of proof has not shifted from PacBio for any issue where PacBio bears the burden, including, without limitation, infringement. Oxford, Inc. reserves the right to amend its response, including asserting additional affirmative and other defenses as they may be discovered or otherwise become available.
- 57. <u>Non-Infringement of the '400 Patent</u>. Oxford, Ltd. has not infringed, either directly, indirectly, by inducing infringement of others, by contributing to the infringement of others, or in any other manner, any valid and enforceable claim of the '400 Patent either literally or under the doctrine of equivalents.
- 58. <u>Invalidity of the '400 Patent</u>. One or more claims of the '400 Patent are invalid because they fail to satisfy the conditions of patentability specified in Title 35 of the United States Code, including, but not limited to §§ 101, 102, 103, and/or 112.
- 59. <u>Prosecution History Estoppel</u>. PacBio is estopped from construing the claims of the '400 Patent to cover or include, either literally or by application of the doctrine of equivalents, methods used or devices manufactured, used, imported, sold, or offered for sale by Oxford, Ltd. because of admissions, amendments, and statements to the USPTO during prosecution of the applications leading to the issuance of the '400 Patent or related family members.
- 60. <u>No Entitlement to Injunctive Relief</u>. PacBio's claim for injunction relief is barred at least because PacBio has not suffered any irreparable injury and because PacBio has an adequate remedy at law.
 - 61. Government Sales. PacBio's claims for relief are limited by 28 U.S.C. § 1498.
- 62. <u>Statutory Damages Limitation</u>. PacBio's claim for damages is statutorily limited by 35 U.S.C. §§ 286, 287 and/or 288.

63. Oxford, Ltd.'s investigation of its defenses is continuing, and Oxford, Ltd. expressly reserves the right to assert any additional defenses under the Federal Rules of Civil Procedure, the patent laws of the United States, and any other defense, at law or in equity, that may now exist or be available in the future based upon discovery and further investigation in this case.

PRAYER FOR RELIEF

WHEREFORE, Oxford, Ltd. prays that the Court enter judgment in its favor and against PacBio, as follows:

- A. Dismissing, with prejudice, PacBio's claims against Oxford, Ltd.;
- B. Denying all relief that PacBio seeks in its Second Amended Complaint;
- C. Finding this case to be exceptional under 35 U.S.C. § 285 and awarding Oxford, Ltd. its costs and attorneys' fees; and
 - D. Awarding Oxford, Ltd. any other relief as the Court deems just and proper.

MORRIS, NICHOLS, ARSHT & TUNNELL LLP

/s/ Jennifer Ying

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CERTIFICATE OF SERVICE

I hereby certify that on August 29, 2019, I caused the foregoing to be electronically filed with the Clerk of the Court using CM/ECF, which will send notification of such filing to all registered participants.

I further certify that I caused copies of the foregoing document to be served on August 29, 2019, upon the following in the manner indicated:

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/s/ Jennifer Ying	
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